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ABSTRACT

Ways in which the lexicon of Irish Sign Language (ISL) has developed, and how it is being continually extended, are examined. Change occurs in several ways. Research to date indicates that there are 59 basic handshapes, from which all vocabulary items are created. Classifiers are used extensively in the nominal and verbal system of ISL, and 15 of the 59 configurations already mentioned are employed in their use. Classifier handshapes are iconic and iconicity serves as an inspiration for the resulting lexical form. Several categories of classifier exist: semantic; surface shape; tracing; holding; quantifying; and so on. Original iconic classifiers have also developed as independent vocabulary items. Many synchronic nominal forms originated as classifier verbal forms. Other factors influencing creation of ISL vocabulary include compounding, technology, and borrowing from English. Establishment of education for the deaf, creation of finger spelling, and development of initialized signs to aid instruction through signing have also influenced the direction of vocabulary creation. Contains 11 references. (MSE)

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Extending the lexicon of Irish Sign Language (ISL)

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Abstract

This paper will discuss how the lexicon of ISL has developed and how it is being continually extended. This happens in several ways. Research to date indicates that there are 59 basic handshapes, from which all vocabulary items are created. Classifiers are used extensively in the nominal and verbal system of ISL and 15 of the 59 configurations already mentioned are employed in their use. Classifier handshapes are iconic and iconicity serves as the inspiration for the resulting lexical form. Several categories of classifiers exist: semantic, surface shape, tracing, holding, quantifying etc. Original iconic classifiers have also developed as independent vocabulary items. Many synchronic nominal forms originated as classifier verbal forms.

Other factors which have influenced the creation of ISL vocabulary include (a) compounding, (b) technology and (c) borrowing influences from English.

Compounding is a very common process in ISL. It may be done by (a) compounding two or more existing signs or (b) creating calque-type compounds. ISL takes advantage of its channel and articulator type so that the simultaneous articulation of two units also generates new vocabulary.

New technological developments, as in computers and household appliances, have initiated lexicon changes. Some changes have been traced diachronically and comparisons made with modern synchronic forms.

With the establishment of education for the deaf, the creation of fingerspelling and the development of initialised signs to aid instruction through signing, has also influenced the direction of vocabulary creation.

In conclusion the paper will outline possible future developments within the lexicon of ISL.

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1.1 Introduction

Research to-date indicates that there are 59 handshapes to be found in Irish Sign Language (ISL), illustrated below in Fig. 1. Variations to, or extensions of basic handshapes serve to create an increased number of possibilities for the formation of signs. The place of articulation or the location of signs in relation to the body and the space in front of the body, the movement path of these signs together with the orientation of the handshape are the four parameters in the construction of a sign. Stokoe (1976,1993) specified three of these parameters which he called *Tabulation* (TAB) which refers to the place of articulation, *Designator* (DEZ) which refers to the handshape and *Signation* (SIG) referring to the movement. Brennan, Colville, & Lawson (1984) followed this principal in their research when transcribing British Sign language (BSL). In more recent years it was felt by researchers like Battison (1974), Frishberg (1975) and Friedman, (1975) that the *Orientation* (ORI) of handshapes should also be included as a fundamental feature in the description of signs. In analysing ISL along these parameters, the realisation of such distinctions as TAB, DEZ, SIG, and ORI provides us with identification systems for the isolation of the particular feature that separates items of vocabulary. Liddell (1990) suggests the phonemic description of sign language using a model consisting of sets of 'movements' and 'holds'. Liddell defines 'movement' as "a segment during which some aspect of the articulation is in transition. Conversely, a hold is defined as a segment in which all aspects of the sign are in steady state." (Liddell:1990:38) Wiggling movement is included in this definition of a hold. However, for the purposes of this paper Stokoe's description provides easy access to the segments of signs which will demonstrate the system for growth or expansion of the lexicon of ISL. The examples in Figs. 2 - 9 illustrate unique realisations by the identification of one distinct significant aspect in the internal structure in the formation of signs.

Fig. 1 (a) The handshapes of ISL.

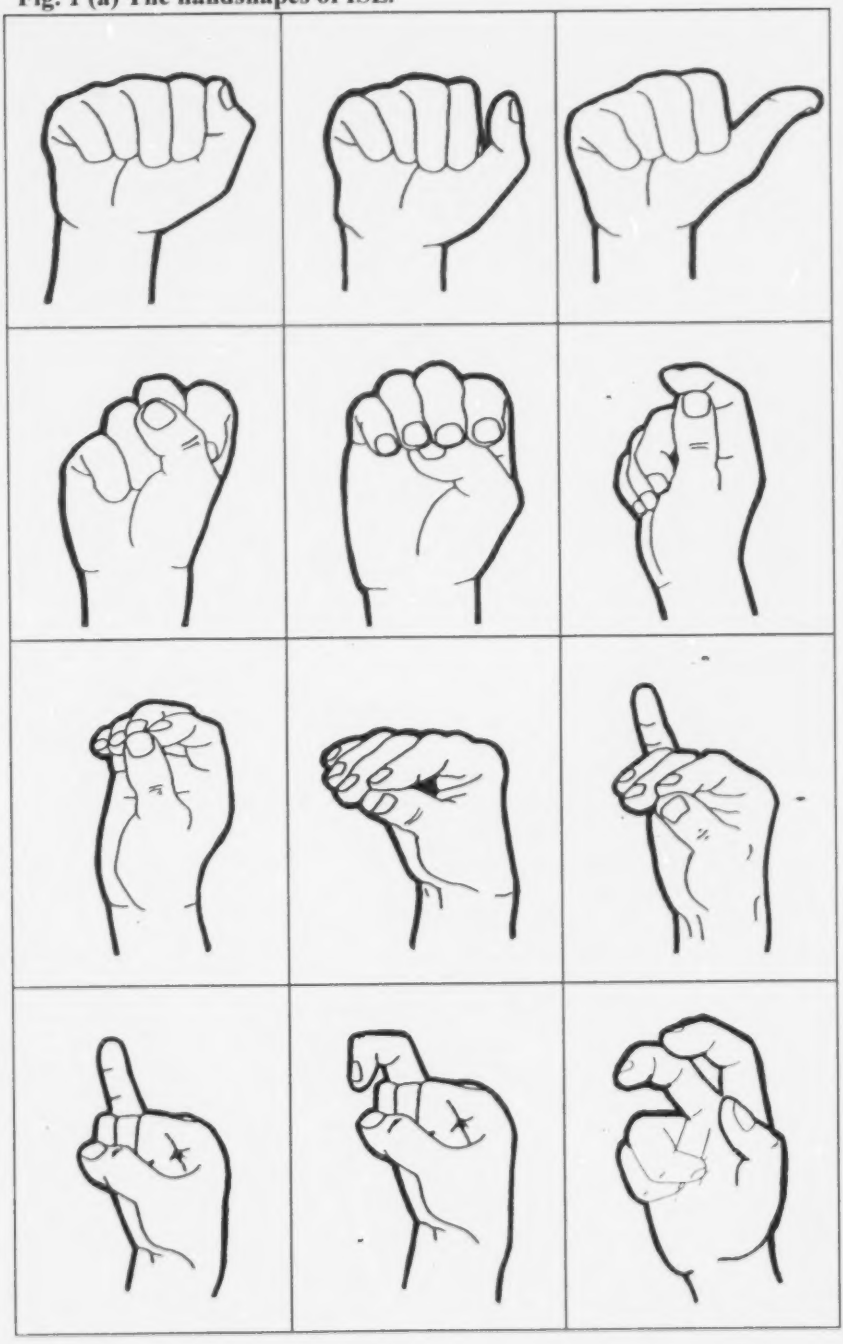

Fig. 1 (b) The handshapes of ISL

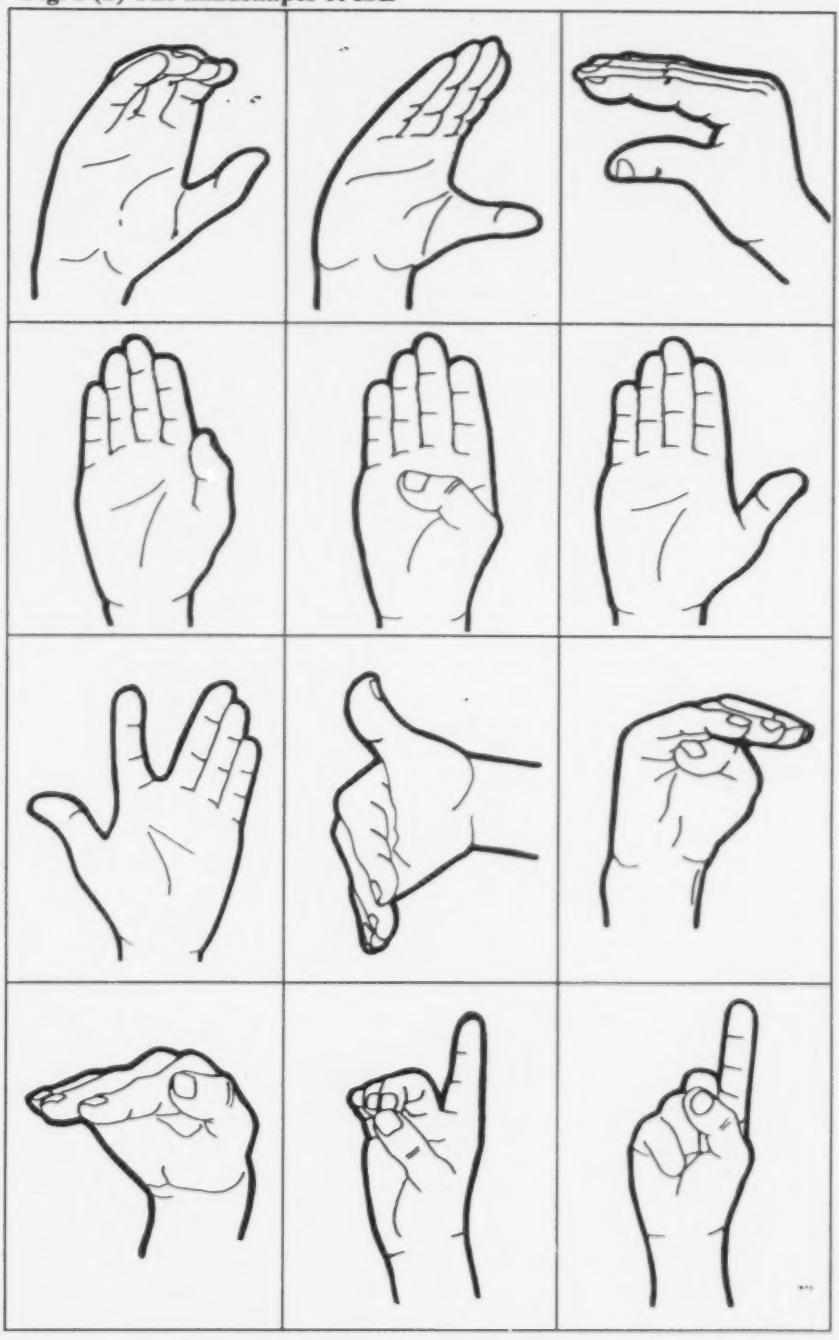

Fig. 1 (c) The handshapes of ISL

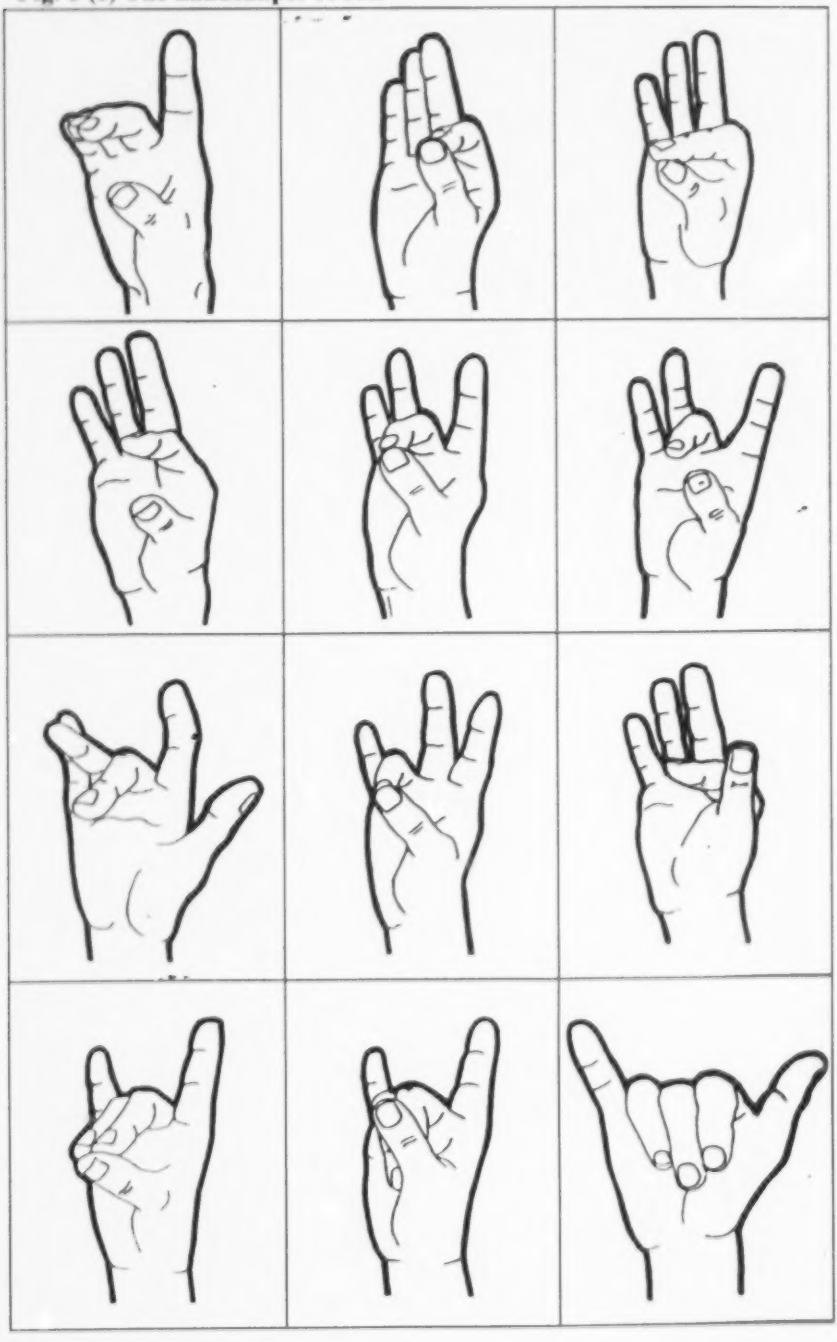

Fig. 1 (d) The handshapes of ISL

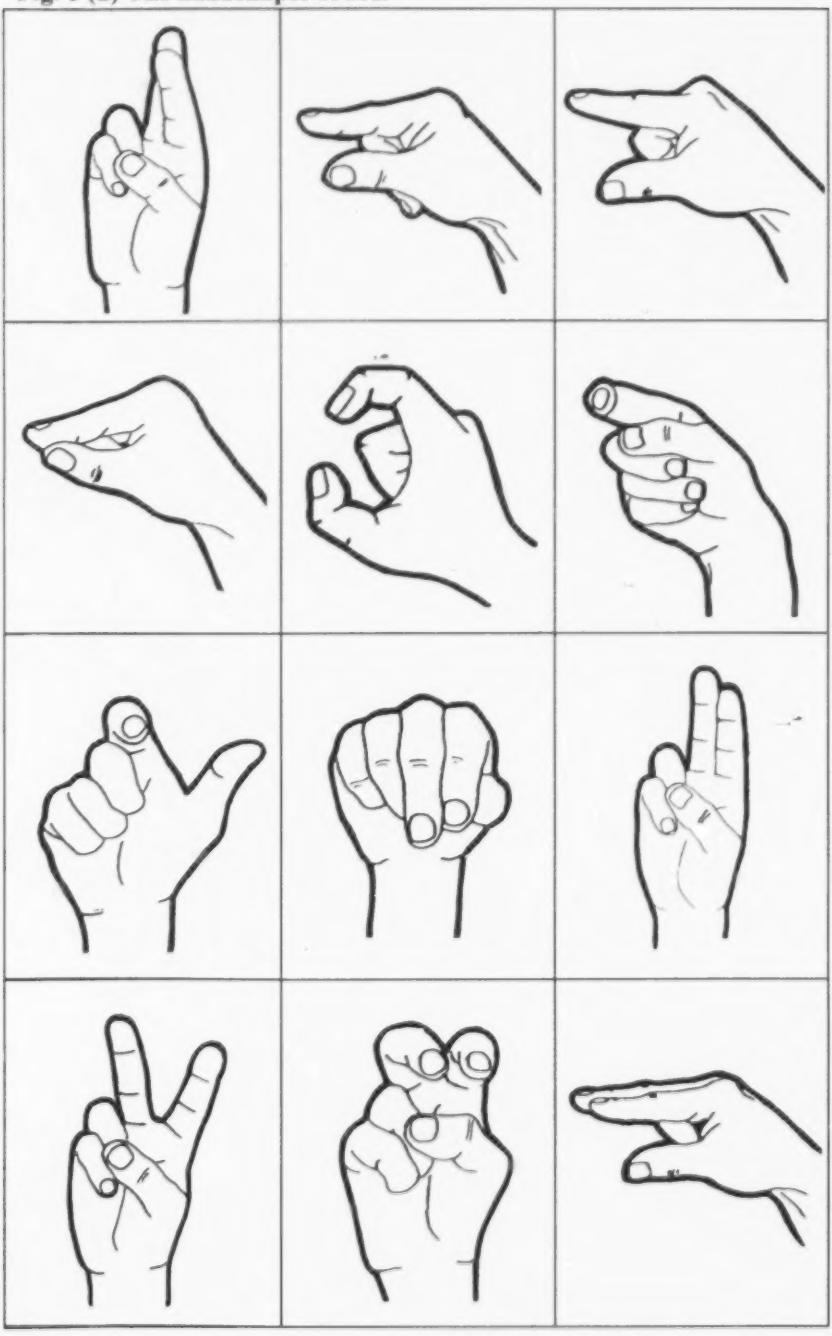

Fig. 1 (e) The handshapes of ISL

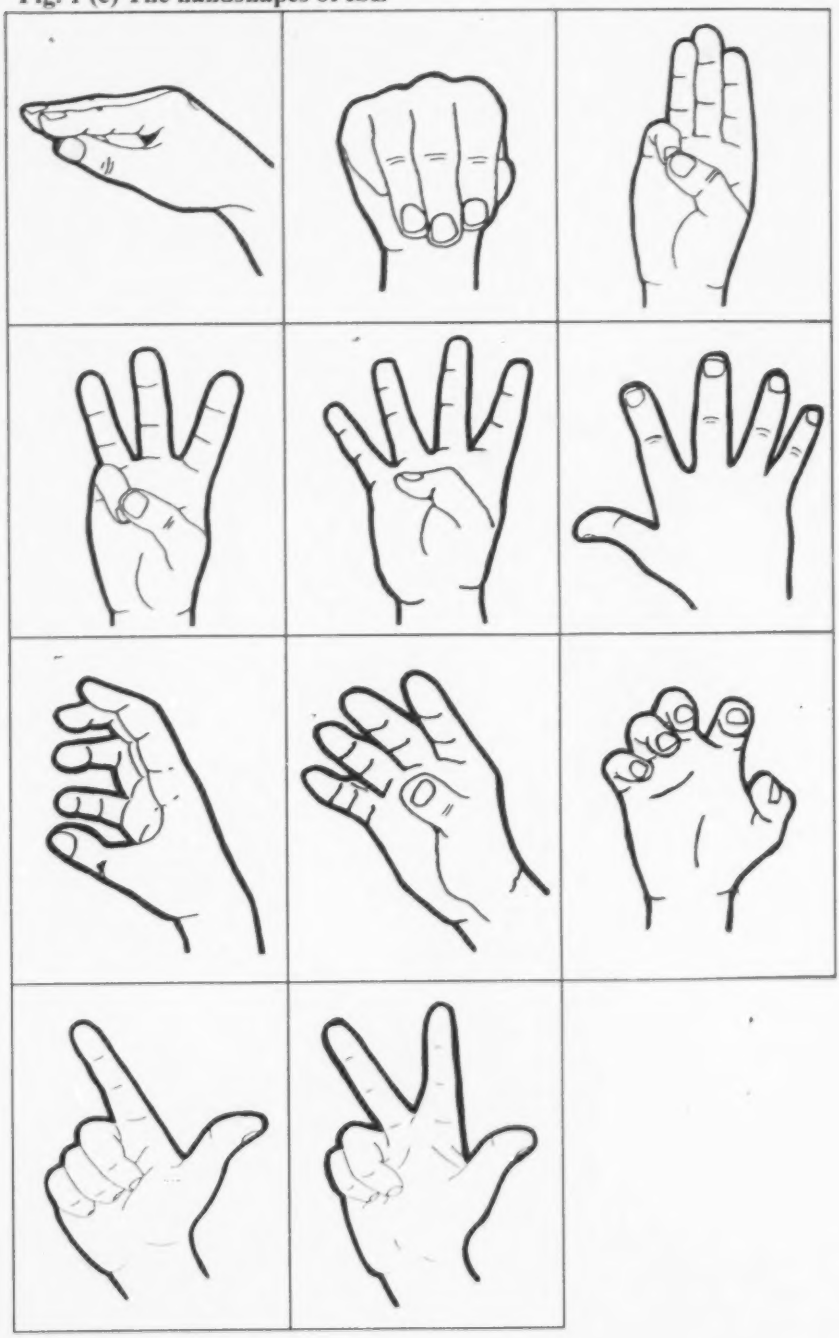

Fig. 2 MARK

Fig. 3 SUFFER

The distinguishing feature is direction or path of movement.

Fig. 4 LESSON

Fig. 5 BLOOD

The distinguishing feature is the orientation of the hand configuration.

Fig. 6 SUGGEST

Fig. 7 HOW

The distinguishing feature is the handshape.

Fig. 8 MY

Fig. 9 STUPID

The distinguishing feature is the location of the sign.

Sign formation in ISL, may be described as containing eight types (within the parameters described above), they are as set out below:-

1. One hand only used to articulate a sign with body or near body contact.

Fig. 10 KNOW

Fig. 11 TELEPHONE.

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2. One hand only used to articulate a sign in free space without any body contact.

Fig. 12 KEY

Fig. 13 MUST

3. A two-handed sign with the two hands having identical shape and touching during the articulation of the sign.

Fig. 14 COACH

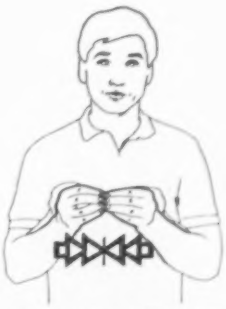

Fig. 15 MENTION

4. A two-handed sign with the hands having identical shape and moving in symmetry but without any contact taking place during the articulation of the sign.

Fig. 16 CAR

Fig. 17 WANT

Fig. 18 SYMBOL/SIGN

Fig. 19 TO ENQUIRE

5. A two-handed sign with identical handshapes performing a similar action and coming in contact with the body.

Fig. 20 SHAME

Fig. 21 OWN

6. A two-handed sign where the right or dominant hand is the active articulator and the other hand is passive.

Fig. 22 TO HAVE/TO EXIST

Fig. 23 THERE/TO EXIST

7. A two-handed sign having different hand configurations with each hand having equal importance (both active articulators).

Fig. 24 LEAD

Fig. 25 HORSE

8. A two-handed sign having identical hand configurations with contact during articulation but having one dominant articulator the other being passive.

Fig. 26 MOTHER

Fig. 27 FATHER

The 'signing space' referred to in the above types of sign formation is illustrated below in Fig. 28. All concepts are articulated within the

Fig. 28 The signing space

confines of the *signing frame/space*. Referent points within the signing space are established during discourse and lexical items are articulated at the given referent point during local discourse. The signing space is divided into meaningful units within an interaction. When describing the articulation of signs in terms of the location of the sign for referents the point in space may be described as to the *right* or *left* of the signer, or in *neutral space*.

At the phonological level of analysis in spoken languages, segments of sounds are traditionally distinguished using such terminology as *phonemes, allophones* etc. Due to the visual system of signed languages an alternate set of terminology, namely, *cheremes* and *allochers* was used to describe separated segments in the formation of signs in their 3 dimensional spatial framework. However, as the growth of research into signed languages around the world increased a return was made to the use of traditional terms in recognition that the distinction of segments in this way provided similar information.

To summarise what has been said in this section, we can state that at the most basic level of analysis into the internal structure of the formation of signs, and the identification of significant distinctions along the parameters of TAB, DEZ, SIG and ORI, helps us to isolate the building blocks or the foundation from which signs are built and therefore identifies the potential for expansion by alteration of a single aspect in the formation of a sign.

1.2 Classifiers

One of the most significant means of expansion within the lexicon of ISL is the use of classifiers. Of the 59 handshapes, 15 are extensively employed in the classifier system which permeates the nominal, verbal and adjectival systems within the language. A classifier as defined by Crystal (1980) refers to a set of entities sharing certain formal or semantic properties. Depending on how an object is perceived by any particular culture, different morphemes are used in order to classify that object as belonging to a particular lexical set; round object set, flat object set et cetera. There are several categories of classifiers in ISL such as semantic, surface shape, tracing, and quantifiers. Classifiers are proforms and need a full reference. The lexical item belonging to a particular morpheme set or class must be given before the classifier is articulated, thus giving the classifier form a specific meaning for the duration of the local discourse, that of its full referent. These classifier forms are also found in spatial verbs.

1.2.1 Semantic classifiers

The classifier for vehicle, as seen in Figure 29, may be classified as a 'semantic' classifier. It represents all land, and sea vehicles such as *car, lorry, motorbike, bicycle*, and various types of *boats* regardless of their size or shape. All semantic classifiers function as fully deictic forms. The orientation may change on occasion for water-based vehicles and a few isolated instances, for example, in the articulation of the lexical item *rollercoaster* the orientation will alter depending on the viewpoint of the signer in relation to the vehicle at any particular time during its movement. However this 'flat hand' handshape is understood to mean **VEHICLE.** Wallin (1990) examines polymorphemic verbs (compound forms) and suggests that parts of the hand (in the flat handshape) represent a set of morphemes. Wallin also suggests that the fingertips are representative of a set of morphemes. Specific points along the classifier handshape represent separate units of meaning. The orientation and location of this handshape draw attention to the frontal or rear view of the vehicle, thus one may demonstrate in which direction a vehicle was facing from the perspective of the signer. However, this information is not explicit in the plural form, a reduplication of the handshape.

The handshape 'index finger extended from closed fist' is the classifier for **PERSON** (Fig. 30). It represents *boy, girl, man, woman* and some animals, *monkey* for example or a two legged animate entity. This classifier is also fully deictic in its path of movement.

The handshape 'index and middle finger extended from the fist and held apart' represents **LEGS** (in Fig. 31). They may represent a human or a two legged animal. This sign may represent the activity of legs in a multitude of ways creating many lexical items such as *to stand, to be seated, to jump, to run, to hop, to be drunk,* or *to dive.*

The classifier for a **saliently 3 dimensional object** (Fig. 32) is represented by the 'bent 5 or clawed hand'. An object may be represented as 'being located at' or 'existing at' a given point in relation to the speaker/signer, or in relation to each other as they appear from the signer's perspective. *t.v., video, chair, computer, printer.*

Semantic classifiers contribute to the growth in the lexicon in that they are a morphological unit which may be understood as an independent unit at the semantic level. When given a full reference these classifiers take on specific meaning and thereafter may represent this specific meaning for the duration of the local discourse. Modulations of movement in the articulation of the handshape and/or modulations in the path of movement

within the signing space give additional adverbial and aspectual information.

Fig. 29 B→-CL 'vehicle'

Fig. 30 1-CL 'person'

Fig. 31 V-CL 'legs'

Fig. 32 5:↓-CL@*rt* 'saliently 3 dimensional object'

1.2.2 Tracing Classifiers

A certain set of handshapes are used to 'trace' or 'draw out' the shape of objects. These are normally articulated with two hands. Representation of real objects or imaginary objects or shapes is possible. Some examples which employ the handshape 'index finger extended from fist' are **SQUARE** (Fig. 33), **CIRCLE** (Fig. 34), and the shape of a **STAR** (Fig. 35). Detailed descriptions of items is possible, for example a *box* containing an 'X' through it, or a *square* containing a *circle* which is divided/marked in four sections and where the perimeter of the *square* has a *diamond* attached to the centre lower line. Iconicity of tracing

classifiers allows for constant creativity of new forms resulting in the expansion of the lexicon.

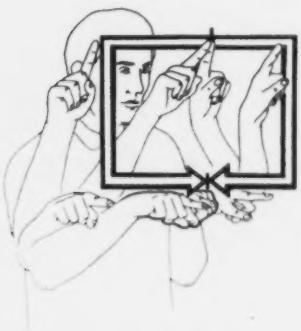

Fig. 33 (2h) 1 outline -CL 'square'

Fig. 34 1 outline -CL 'circle'

Fig. 35 (2h) 1 outline -CL 'star'

The handshape 'fingers and thumb bent to form a curve' may represent cylindrical objects of varying degrees of depth. One such example may be found in the sign **UPRIGHT CYLINDRICAL OBJECT** (Fig. 36) meaning *pipe* palms facing left and right. In another orientation, palms facing down, this configuration represents **TO CARRY A CYLINDRICAL OBJECT IN A HORIZONTAL PLANE** (Fig. 37), namely a *pipe*. This cylindrical object in other contexts and in combinations with other signs and contexts may mean *lamp post, flag post* and so on.

Fig. 36 (2h) C→ -CL 'upright cylindrical object'

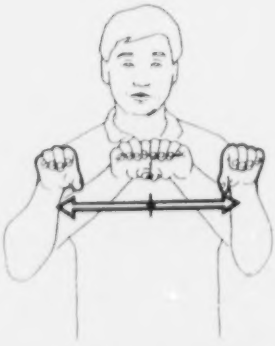

Fig.37 (2h) Ct→-CL

The handshape (Fig. 38) 'index finger and thumb touching, all other fingers extended' represents very small objects such as *sewing needle, thread, twine*, and *electric wire*.

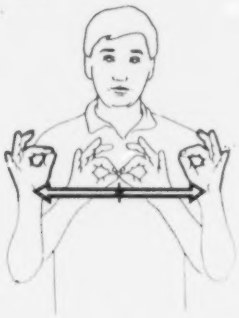

Fig. 38 (2h) G:t -CL 'twine'

1.2.3 Surface shape classifiers

Surface shape classifiers are made by the 'flat hand' handshape. The thumb being extended, held upright or bent is insignificant in terms of meaning in ISL. The classifier traces the surface shape of flat objects in any orientation. It may be articulated with one hand in examples such as **WALL** or **SCREEN** (Fig. 39). It may also be articulated with both articulators in examples such as **FLAT-SURFACE OVERHEAD** (Fig. 40) which may in context be obvious in meaning as *ceiling* or *platform on a higher plane*. When articulated as two hands moving in symmetry, palm orientation facing inward, it is then representative of the meaning **TWO-UPRIGHT-FLAT-SURFACE** (Fig. 41) *corridor*, or *hall*. When articulated with two hands, palm orientation down and the movement path of both hands moving away from each other from the centre outward in opposite direction, it is understood to mean **TABLE** (Fig. 42), and when this form is articulated again at another height it means **SHELF** (Fig. 43). The same handshape when articulation is accompanied with the non-manual features of 'pursed lips' and 'squinted eyes' then indicates a **SMOOTH-FLAT-SURFACE** (Fig. 44) such as a road or bowling alley. This handshape, when articulated in a movement outlining the contours of a hilly surface, is indicative of **UNEVEN TERRAIN** (Fig. 45).

Fig. 39

Fig. 40

Fig. 41

Fig. 42

Fig. 43

Fig. 44

Fig. 45

1.2.4 Holding classifiers

This category of classifiers may be articulated by one or two articulators depending on the item referred to. Their creation has been inspired through attempts to mimic or reflect the real-life item and its usage by showing how the object is held. Therefore, verb forms were created initially and the noun forms developed later. The distinct feature identifying the noun/verb form may be noted by one significant aspect in the articulation, namely the length of the duration of movement in the articulation, the noun form having the shorter length of movement. Examples of holding handshapes may be seen in the signs **HAIRBRUSH** (Figs. 46 and 47), **COMB** (Fig. 48) **SWEEPING BRUSH(BROOM)** (Fig. 49). Note: the examples Figs. 46, and 47 are only two of several possible handshapes used in ISL to denote the item 'hairbrush'.

Fig. 46 5:-CL 'hairbrush' *noun*

Fig. 47 A -CL 'hairbrush' *noun*

Fig. 48 T -CL 'comb' *noun*

Fig. 49 (2h) S -CL 'Broom' *noun*

1.2.5 Quantifiers

The classifier handshape for quantification in ISL is the '5' or 'all fingers extended and spread'. The fingers may be slightly bent or held in a relaxed manner. This classifier may represent many people. When articulated with one hand only, it refers to an unspecified number of people between five and nine. When articulated with two hands it refers to an unspecified number of people of ten or more. It may also represent animals. When representing the entity **LOT BIRDS** (a lot of birds) taking flight, their direction and pattern of movement is indicated by the orientation and movement of both hands during the articulation. This handshape when 'slightly bent' may indicate a crowd of people approaching.

Fig. 50 **gaze lf**

LOT BIRD (2h) 5↓ -CL -*lf* 'burst up into air'

1.3 Educational influences

With the development of education for the deaf, a visual manual system was invented to represent the twenty six letters of the English alphabet. Over time this set of manual symbols have been imported into original ISL and are evident in the many lexical initialised items. The handshapes represent the English word; however, the item of vocabulary has now been incorporated into the morphological structures of ISL. Some examples are in the signs, **TRUE, REAL, CERTAIN** (Figs. 51-53). All of these vocabulary items are semantically related and have the same TAB, SIG, and ORI but the DEZ is the symbol or handshape representing 't', 'r', 'c'. Again, another set of examples may be found with the meanings **HAPPY, GLAD, DELIGHTED** (Figs. 54 - 56). All of the elements of formation are constant with the only significant difference

being the DEZ which represents the initial letter from the English language.

Fig. 51 TRUE

Fig. 52 REAL

Fig.53 CERTAIN

Fig. 54 HAPPY

Fig. 55 GLAD

Fig.56 DELIGHTED

Some of this borrowing from English may be seen in *calque type* compound formation as in the example *hotel* whose component parts are the bound morpheme **'H'** of English + the morpheme **BED** from ISL.

Fig. 57 Calque formation H + BED 'hotel'

1.4 Iconicity in lexical items originating in non-tracing classifiers

There is a category of lexical items whose origins are to be found in holding, touch and instrument type classifiers. Their noun and verb forms are again distinguished by the length of movement. However, through iconicity and usage, these items have acquired a fixed place of articulation and are now considered to have full lexical status. Examples may be found in the signs **CIGARETTE/SMOKING A CIGARETTE, SCISSORS/TO CUT, CAR/TO DRIVE, BOOK, BABY, BUTTERFLY.**

Fig. 58(a) CIGARETTE (noun)

Fig.58(b) SMOKING A CIGARETTE (verb)

Fig. 59(a) SCISSORS (noun)

Fig. 59(b) TO-CUT-WITH-SCISSORS (verb)

Fig. 60(a) CAR (noun)

Fig. 60 (b) TO DRIVE (verb)

Fig. 61 BABY(noun)

Fig. 62 BUTTERFLY (noun)

1.5 Arbitrary Signs

The lexicon of ISL has not been derived entirely from iconicity. Many of the forms for lexical items are completely arbitrary and must be learned as such. Some examples from ISL may be found in the handshape (Irish F). The place of articulation is on the non-dominant side, the sign is located on the face around the jaw line. The distinguishing feature is the pace of movement combined with various non manual features together with the head and shoulder movement. These combinations of features give rise to several explicitly different meanings such as *oops - I made a mistake* (Fig.63), *I'm surprised at that* (Fig. 64). *Take that with a grain of salt* (Scepticism) (Fig. 65) or it can also mean *I was wrong*, (Fig. 66) or be used as a response to news as *fancy that* (Figs. 66, or 64) or *I would not have expected that* (Figs. 66 or 64). Please note, these are approximate translations. There is no direct English equivalent and context provides meaning.

Fig. 63

Fig. 64

Fig. 65

Fig. 66

Another handshape in this category of lexical items is the 'closed fist with thumb extended'. It is the morpheme used to mark *occurrence*, *event* or *achievement*. It normally precedes the verb. This may be used in many contexts and has multiple translations. It may signal the completion of an action which happened over time as in *building a house*. It may signal success as in having *made a new date* or *got a new girlfriend*. It may mark a change of state as in the repair of a broken television.

Fig. 67 Marker of occurrence.

1.6 Compounds

"Compounds in English are comprised of two types of morphemes or units of meaning, 'bound morphemes' and 'free morphemes' creating a new word or lexical item. The meaning of this new lexical item may or may not be related to that of the original parts. Free morphemes are those smallest units which contain meaning, and may be understood independently. Bound morphemes are those smallest units or forms which contain meaning but may only be fully understood when combined with another morpheme to form a single lexical item with precise meaning. Compounds are formed in a multitude of combinations of noun + noun, adjective + noun, verb + verb. *Lighthouse keeper* is a compound containing bound and free morphemes. It may be analysed as light (f.m.) house (f.m.) keep (f.m.) er (b.m.)

lighthouse keeper
light/house / keep/er
noun+noun+verb+affix (creating a noun by derivational morphology)"

(Ó Baoill & Matthews, forthcoming)

The free morphemes **MOTHER** and **FATHER** (Fig. 68) are both articulated with a movement entailing two taps or contact of the hands. In the compound formation of *parent* each component looses some of its internal movement and the final compound is signed with only two movements entailing contact rather than the sum of the two originals. In the compound **BROWN∩FACE** = *tan* (Fig. 69), there is some movement in the articulation of **BROWN**. The duration of articulation is reduced in the compound to one short movement and the curved hand configuration of **FACE** is softened to an open '5' hand configuration. In the compound *breakfast* being **MORNING∩EAT** (Fig. 70) there is a reduction from two movements to one in the element **EAT**. There are two variations of the hand configuration in the first element. One configuration may be described as that of three closed fingers or 'm', the alternative commonly used configuration being the flat handshape. In the compound **BLESS∩HOUSE** (Fig. 71) there is a significant loss of movement in the initial element, and in the sign **HOUSE** two movements are reduced to one. In the compound **BLUE∩MARK∩CLASSIFIER 3** (bent) (Fig. 72) meaning *bruise* the duration of the length of movement in the articulation of the first element is radically reduced. There is a continuum of movement throughout the articulation of the second element and the pace of articulation of the final element is much slower. The duration of maintaining the hand configuration of this last element is as long as the

sum of the duration of the first two elements. The place of articulation of the last element is dependent on the 'real life' location of the bruise. These are examples of how the lexicon is created.

ISL COMPOUND SIGN	LEXICALISED MEANING OF COMPOUNDS
MOTHER∩FATHER	Parent
BROWN∩FACE	Tan
MORNING∩EAT	Breakfast
GREEN∩AREA	Field
COLOUR∩SPREAD	Colour ran
BLESS∩HOUSE	Church
YELLOW∩PHONE∩BOOK	Golden Pages (Telephone Directory)
MARK∩INDEX FINGER ON FOREHEAD	Scar
BLUE∩MARK∩3:-CL (arm)	Bruise (on arm)

Fig. 68 PARENT

Fig. 69 TAN

Fig. 70 BREAKFAST

Fig. 71 CHURCH

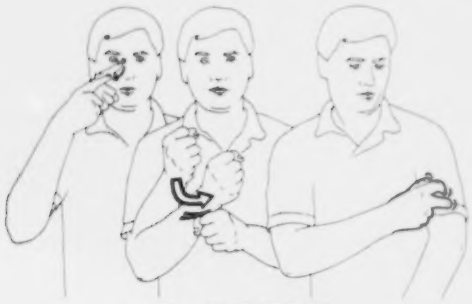

Fig. 72 BRUISE

1.7 Technology

Having looked at formational parameters let us now turn our attention to reasons for sign innovations. With changes in technology, over time, the language has changed and evolved with it to accommodate new inventions. The original sign for **LIGHT** was articulated with the handshape of index finger extended. The place of articulation was in front of the mouth and the articulation of this sign was accompanied by a small outward blow of air from pursed lips. Such a form got its inspiration from the **CANDLE** (Fig. 73). With the invention of the light bulb an addition was made in the production of the sign representing **LIGHT**. The addition was the closed fist being flicked open, representing the bulb shining (Fig. 74). With time, usage and a younger generation who had never experienced light by candlelight, the first element was lost (Fig. 75). **FLUORESCENT lighting** is indicated by two hands in the closed fist to open '5' hand configuration. They are both active articulators and their articulation is accompanied with the non-manual feature of blinking narrowed eyes (Fig. 76).

Fig. 73 CANDLE

Fig. 74 CANDLE-LIGHT

28

Fig.75 LIGHT-BULB

Fig. 76 FLUORESCENT-LIGHT

Variations in the formations for the lexeme LIGHT

Another example of lexical change is found in the signs used to describe washing. At one time the handshapes were two closed fists and the movement reflected the notion of one scrubbing on a scrubbing board. There was also the sign for *mangle* which was articulated as a closed fist in the action of turning the handle, with a flat hand representing the clothes going through the mangle between the rollers. The sign for today's automatic washing machine is articulated as **WASH∩INDEX CIRCULAR MOVEMENT**. The hand configuration in this compound is initially two closed fists, palms facing together. The hands make contact and are articulated in the movement of a scrubbing action. This is followed by the index finger extended on the dominant hand indicating a circular movement of the drum.

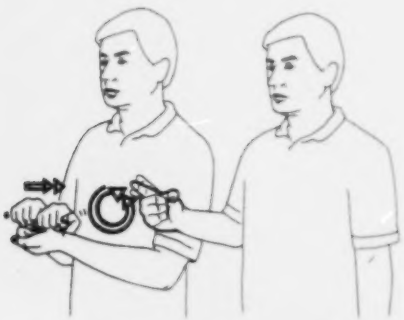

Fig. 77 WASH∩1 -CL 'index circular movement'

The telephone has undergone many changes both technically and cosmetically. The original sign reflected the old apparatus held to the mouth in one hand with the separate listening device held to the ear. A winding action was articulated at the ear with the 't' handshape (Fig. 78). The change in handshape became the 'y' handshape, that is the thumb and little finger extended, and now represents the shape of the modern day handset of the telephone (Fig. 79). There is also the curved handshape used to signify a mobile phone and there is the combination or simultaneous compound of thumb and little finger extended with the second hand articulating the keyboard to denote the **MINICOM** or text telephone (Fig. 80).

Fig. 78 (old) TELEPHONE

Fig. 79 TELEPHONE

Fig. 80 TEXT TELEPHONE

The difference in the movement and rhythm in the articulation of *typing* is the distinguishing factor in supplying information about the old manual typewriters and the modern electric keyboard which features a 'wiggling' action of the fingers rather than a deliberate upward and downward action.

Fig. 81 (old) TYPING/TYPEWRITER

Fig.82(new) TYPING/TYPEWRITER

1.8 Conclusion

We have seen that ISL has several means within its structure which are employed in extending the number of possibilities for new creations within the lexicon. Close examination of the internal structure of signs provides us with parameters by which we may identify the significant element in sign formation i.e. handshapes, their movement paths, orientations and locations - body or free space, contact or non-contact, single or double articulators which when used in certain combinations is the distinction between lexical items. Furthermore, Irish Sign Language makes much use of iconicity in the creation of lexical items and also makes use of semantically related categories by retaining most of the characteristics of one form and making only one significant alteration in the formation of a sign to realise another form or morpheme. ISL uses compound formations based on the internal structure of the language itself and has also borrowed some external features of English creating other useful combinations. Finally, classifiers which permeate the nominal and verbal system of ISL, particularly tracing and holding classifiers, possess an infinite number of possibilities for the creation of new lexical items.

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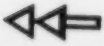
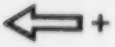
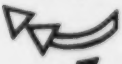
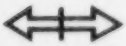
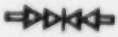
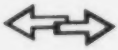
Key to Transcription Symbols

move once		move twice	
hold and move		curved movement, twice	
circular movement		cross movement	
hands contact, move away from each other		hands contact and move twice	
move hands in direction of arrow		full circular movement twice	
hands move in opposite direction from each other		forward movement away from signer	
touch twice		movement towards signer	
fingers wiggle twice		fingers wiggle three times	
briskly open and close fingers		finger move once	
finger move twice		body contact	

→	A thick arrow pointing to the right indicates that the fingers are not facing upward.
↓	An arrow pointing downward indicators that the palm is facing downward.
↑	An arrow pointing upward indicates that palm is facing upward.
CAPITAL	An English word in capital letters represents an ISL sign; this word is called a *gloss*.
WORD-WORD	When more than one English word is needed to gloss an ISL sign, the English words are separated by a hyphen.
(2h)	This symbol for 'two hands' is written before a gloss and means that the sign is made with two hands.

T,H,G	A capital letter represents a particular handshape. These particular capital letters represent handshapes of ISL and are different to the internationally used American Sign Linguistic symbols.
-CL	This symbol for *classifier* is written after the symbol for the handshape that is used in that classifier.
1	This symbol represents the handshape closed fist, index finger fully extended, sometimes known as the handshape 'd' when used in fingerspelling (spelling out English words).
5	This symbol represents the handshape open hand, all fingers fully extended.
;	This symbol indicates that the handshape is bent.
@	This symbol indicates a particular type of movement that is often used when giving something a spatial location. It is characterised by a certain tenseness and a 'hold' at the end of the movement.
rt ***lf*** ***cntr***	The symbol *'rt'* stands for 'right'; *'lf'* for 'left'; and *'cntr'* for 'centre'. When a sign is made in or toward a particular location in space, that place or direction is indicated after the gloss. When a symbol like *'rt'* is written before a gloss, it indicates the location where the sign began. The symbol *'cntr'* is only used when that space directly between the Signer and the Addressee represents a particular referent (person, place or thing). If none of these symbols appear, the sign is produced in neutral space.
'word.'	Single quotes around a lower case word or words is used to help describe the meaning of a classifier in the context of a particular sentence.
_____	A line proceeding from a gloss indicates the handshape of that sign is held in its location during the time period shown with the line.
outline	This symbol indicates that the handshape is used to 'outline' a particular shape.
t	This symbol indicates that both hands in the classifier move or act 'together' to describe the referent - i.e. both hands have equal value and there is no 'dominant' or 'passive' hand.

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